What is claimed is:

1. A magnetic disk apparatus comprising:

a cipher key memory unit which stores a cipher key used for encoding and decoding data;

a cipher encode unit which encodes data input via an interface from an upper apparatus using the cipher key, the cipher encode unit recording the encoded data onto a record medium;

a cipher decode unit which decodes the encoded data read out from the record medium using the cipher key, the cipher decode unit outputting the decoded data via the interface to the upper apparatus; and

a cipher key change unit which changes a cipher key stored in the cipher key memory unit.

2. The magnetic disk apparatus according to claim 1, wherein

the cipher key memory unit stores a predefined cipher key written in at a stage of manufacturing the apparatus.

3. The magnetic disk apparatus according to claim 1, wherein

the cipher key memory unit is a nonvolatile memory.

4. The magnetic disk apparatus according to claim 1, wherein

the cipher key memory unit is a medium area other than a user recording area of the record medium.

5. The magnetic disk apparatus according to claim 1, wherein

the cipher key change unit changes the cipher key stored in the cipher key memory unit when all the record data residing in a user recording area on the record medium is discarded collectively.

6. The magnetic disk apparatus according to claim 1, wherein

the cipher key change unit changes the cipher key in the cipher key memory unit in response to a special command other than a command system for the upper apparatus.

7. The magnetic disk apparatus according to claim 1, wherein

the cipher key change unit changes the cipher key in the cipher key memory unit in response to a special command from a cipher key change application installed in the upper apparatus.

8. The magnetic disk apparatus according to claim 1, wherein

the cipher key change unit changes the cipher key in the cipher key memory unit in response to a special command from a cipher key change application installed by the upper apparatus via network.

9. The magnetic disk apparatus according to claim 1, wherein

the cipher key change unit changes the cipher key in the cipher key memory unit by recognizing a physical event manipulation in the apparatus.

10. The magnetic disk apparatus according to claim 1, wherein

the cipher key change unit changes the cipher key by generating a new cipher key through a process of, e.g., shuffling of the cipher key stored in the cipher key memory unit.

11. The magnetic disk apparatus according to claim 1, wherein

the cipher key change unit changes a cipher key stored in the cipher key memory unit, into another cipher key added to a cipher key change command from the upper apparatus.

12. A cipher processing method for a magnetic disk apparatus, comprising:

a cipher key memory step of storing in a memory unit a cipher key used for encoding and decoding data;

an encoding/recording step of converting data input via an interface from an upper apparatus into encoded data using the cipher key, and storing the encoded data onto a record medium;

a decoding/readout step of decoding the encoded data read out from the record medium using the cipher key, and outputting the decoded data via the interface to the upper apparatus; and

a cipher key change step of changing a cipher key stored in the cipher key memory unit.

13. The cipher processing method for a magnetic disk apparatus according to claim 12, wherein

the cipher key change step includes changing the cipher key stored in the cipher key memory unit when all the record data residing in a user recording area on the record medium is discarded collectively.

14. A program operable to cause a computer incorporated in a magnetic disk apparatus to execute:

a cipher key memory step of storing in a memory unit a cipher key used for encoding and decoding data;

an encoding/recording step of converting data input via an interface from an upper apparatus into encoded data using the cipher key, and storing the encoded data onto a record medium;

a decoding/readout step of decoding the encoded data read out from the record medium using the cipher key, and outputting the decoded data via the interface to the upper apparatus; and

a cipher key change step of changing a cipher key stored in the cipher key memory unit.

15. The program according to claim 14, wherein

the cipher key change step includes changing the cipher key stored in the cipher key memory unit when all the record data residing in a user recording area on the record medium is discarded collectively.